

Fujitsu recommends Windows 8 Pro.

Data Sheet

Fujitsu CELSIUS M720 Workstation

Your "Thoroughbred" Workstation

If you're looking for reliable performance when using demanding applications, the Fujitsu CELSIUS M720 single-processor workstation meets your needs. It can be individually configured, helping you to enhance your productivity. It features best-in-class noise emissions of only 20 dB for a quiet and efficient working environment. Comprehensive ISV certifications ensure your applications run smoothly. Finally, the convenient cold plug access at front simplifies subsequent expansion.

Performance

Higher productivity

- High performance multi-core processor, next generation graphics subsystems, quad-channel memory technology and high-speed hard disk drives

Ergonomics

Noise-reduced system engineered in Germany

- Optimized thermal management, low-noise chassis and silent fans

Reliability

System stability for the complete lifecycle

- High product standards thanks to top-quality components and comprehensive testing in certified in-house laboratories for 24/7 operation

Certification of workstation applications

Stability, compatibility and performance for the main workstation applications

- Comprehensive support for ISV applications and ease of integration into existing IT networks

Expandability

Excellent expandability for future demands

- Increased memory capacities of up to 128 GB



Components

Processor	Intel® Xeon® processor E5-1660 (6 Cores / 12 Threads, 3.30 GHz, up to 3.9 GHz, 15 MB, 8.0 GT/s)
	Intel® Xeon® processor E5-1650 (6 Cores / 12 Threads, 3.20 GHz, up to 3.8 GHz, 12 MB)
	Intel® Xeon® processor E5-1620 (4 Cores / 8 Threads, 3.60 GHz, up to 3.8 GHz, 10 MB)
	Intel® Xeon® processor E5-1607 (4 Cores / 8 Threads, 3.00 GHz, 10 MB)
	Intel® Xeon® processor E5-1603 (4 Cores / 8 Threads, 2.80 GHz, 10 MB)
	1st Intel® Xeon® processor E5-2690 (8 Cores / 16 Threads, 2.90 GHz, up to 3.8 GHz, 20 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2680 (8 Cores / 16 Threads, 2.70 GHz, up to 3.5 GHz, 20 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2670 (8 Cores / 16 Threads, 2.60 GHz, up to 3.3 GHz, 20 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2667 (6 Cores / 12 Threads, 2.90 GHz, up to 3.5 GHz, 15 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2665 (8 Cores / 16 Threads, 2.40 GHz, up to 3.1 GHz, 20 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2660 (8 Cores / 16 Threads, 2.20 GHz, up to 3.0 GHz, 20 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2650L (8 Cores / 16 Threads, 1.80 GHz, up to 2.3 GHz, 20 MB, 7.2 GT/s)
	1st Intel® Xeon® processor E5-2650 (8 Cores / 16 Threads, 2.00 GHz, up to 2.8 GHz, 20 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2643 (4 Cores / 8 Threads, 3.30 GHz, up to 3.5 GHz, 10 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2640 (6 Cores / 12 Threads, 2.50 GHz, up to 3.0 GHz, 15 MB, 7.2 GT/s)
	1st Intel® Xeon® processor E5-2637 (2 Cores / 4 Threads, 3.00 GHz, up to 3.2 GHz, 5 MB, 8.0 GT/s)
	1st Intel® Xeon® processor E5-2630L (6 Cores / 12 Threads, 2.00 GHz, up to 2.5 GHz, 15 MB, 6.4 GT/s)
	1st Intel® Xeon® processor E5-2630 (6 Cores / 12 Threads, 2.30 GHz, up to 2.8 GHz, 15 MB, 7.2 GT/s)
	1st Intel® Xeon® processor E5-2620 (6 Cores / 12 Threads, 2.00 GHz, up to 2.5 GHz, 15 MB, 7.2 GT/s)
	1st Intel® Xeon® processor E5-2609 (4 Cores / 8 Threads, 2.40 GHz, 10 MB, 6.4 GT/s)
	1st Intel® Xeon® processor E5-2603 (4 Cores / 8 Threads, 1.80 GHz, 10 MB, 6.4 GT/s)
Operating systems	
Operating system	Windows® 7 Professional 64-bit
Operating system compatible	Windows 8
	Windows® 7 Professional 32-bit
	Windows® XP Professional x64 Edition
	Windows® Server 2008 R2
	Linux
Operating system notes	Certified for Red Hat Enterprise Linux
	Certified for SUSE Enterprise Desktop
	Certified for SUSE Enterprise Server
	For some configurations third party drivers are currently not available or configuration restrictions may apply.
	SCU ports are not supportet for Windows® XP 32bit (restricton by Intel®). Therefore an additional storage controller (D2607 or D2616) is necessary.
	Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
Memory modules	
	2 GB (1 module(s) 2 GB) DDR3, ECC, 1600 MHz, PC3-12800
	4 GB (1 module(s) 4 GB) DDR3, ECC, 1600 MHz, PC3-12800
	8 GB (1 module(s) 8 GB) DDR3, ECC, 1600 MHz, PC3-12800
	8 GB (1 module(s) 8 GB) DDR3, registered, ECC, 1600 MHz, PC3-12800
	16 GB (1 module(s) 16 GB) DDR3, registered, ECC, 1600 MHz, PC3-12800

Graphics	Ultra-high-end 3D: NVIDIA® Quadro® 6000, 6 GB, 448 cores, PCIe x16, 1x DVI-I, 2x DisplayPort
	Ultra-high-end 3D: NVIDIA® Quadro® K5000, 4 GB, 1536 cores, PCIe x16, 1x Dual Link DVI-I, DVI-D, 2x DisplayPort
	High-end 3D: AMD FirePro™ W7000, 4 GB, 1280 stream processors, PCIe x16, 4 x DisplayPort
	High-end 3D: NVIDIA® Quadro® K4000, 3 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: NVIDIA® Quadro® K2000D, 2 GB, 384 cores, PCIe x16, 2x Dual Link DVI-I
	Midrange 3D: NVIDIA® Quadro® 2000D, 1 GB, 192 cores, PCIe x16, 2x Dual Link DVI-I
	Midrange 3D: NVIDIA® Quadro® K2000, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: AMD FirePro™ W5000, 2 GB, 768 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: AMD FirePro™ V4900, 1 GB, 480 stream processors, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: NVIDIA® Quadro® K600, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: AMD FirePro™ V3900, 1 GB, 480 stream processors, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: NVIDIA® Quadro® 410, 512 MB, 192 cores, PCIe x16, 1x DVI-I, 1x DisplayPort
	Professional 2D: NVIDIA® NVS 510, 2 GB, 16 cores, PCIe Gen2 x16, 4x miniDP
	Professional 2D: NVIDIA® NVS 310, 512 MB, 16 cores, PCIe Gen2 x16, 2x DisplayPort
	Professional 2D: NVIDIA® NVS 300, 512 MB, 16 cores, PCIe Gen2 x16, 2x LFH59 (DP/DVI-I)
	GPU computing card: NVIDIA® Tesla™ K20, 5 GB, 2496 cores, PCIe x16
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP
Hard disk drives (internal)	SSD SATA III Premium, 256 GB, 2.5-inch
	SSD SATA III Premium, 128 GB, 2.5-inch
	SSD SATA III, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 10000 rpm, 1000 GB, 2.5-inch, business critical
	HDD SATA III, 10000 rpm, 500 GB, 2.5-inch, business critical
	HDD SATA III, 7200 rpm, 4000 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 3000 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 250 GB, 3.5-inch
	HDD SATA II, 7200 rpm, 2000 GB, 3.5-inch, business critical
	HDD SAS, 15000 rpm, 300 GB, 2.5-inch
	HDD SAS, 10000 rpm, 600 GB, 2.5-inch
	HDD SAS, 10000 rpm, 450 GB, 2.5-inch
	HDD SAS, 10000 rpm, 300 GB, 2.5-inch
Hard disk notes	*Disk imaging software of the customer must be 4k sector size / advanced format ready
	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (business critical HDDs required)
Drives (optional)	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MCR 24in1 & USB 3.0 front con., 3.5"
	MultiCard Reader 24in1 USB 2.0 3.5"
SCSI / SAS Controller	RAID 5/6 Ctrl. 6 Gbit/s 8 ports ext. 512 MB Cache
	RAID 0/1 Ctrl. 6 Gbit/s 8 ports ext.

**Interface add on cards/components
(optional)**

WLAN III, 802.11g/Draft-n (Windows only, dedicated regions only)
 USB 3.0 PCIe x1
 Serial Interface FH
 Gigabit Ethernet PCIe x1, DS
 eSATA Interface
 Dual serial card PCIe x1, powered
 Dual serial card PCIe x1
 Dual 1 Gigabit Ethernet PCIe x4
 Dual 10 Gigabit Ethernet PCIe x8

Base unit	CELSIUS M720	CELSIUS M720 power
Mainboard		
Mainboard type	D3128	
Formfactor	ATX	
Chipset	Intel® C602	
Processor socket	Socket R	
Processor quantity maximum	1	
Memory slots	8 DIMM (DDR3) ECC/non-ECC	
Supported capacity RAM (max.)	128 GB	
Memory notes	In configurations with 4 GB and more the visible memory may be reduced to approximately 3.5 GB or less (for 32-bit operating systems) and configurations with 8 GB the visible memory may be reduced to approximately 7.5 GB or less (depending on system configuration). Large memory may lead to long boot times. When using a 32-bit operating system the maximum of memory might be 900 MB.	
LAN	Built-in 10/100/1000 MBit/s Intel® 82579 LM	
Audio codec	Conexant CX20642	
Audio features	High Definition Audio	
I/O controller on board		
Serial ATA total	6	
thereof SATA III	2	
SATA RAID support	0, 1, 10, 5	
SAS Controller type	optional upgrade to 4 ports, Intel C604	
SAS RAID support	0, 1, 10	
Interfaces		
Audio: in (rear)	1	
Audio: out (rear)	1	
Audio: in	1	
Audio: out	1	
Internal speakers	1	
USB 2.0 total	11	
USB 3.0 total	2	
USB front	4 (2x USB 3.0)	
USB rear	6	
USB internal	3, thereof 1 type A	
Mouse / Keyboard (PS/2)	1 / 1	
Ethernet (RJ-45)	1	
Interface Module notes	Anytime USB charge functionality	
Drive bays		
Drive bays total	12	
2.5-inch bays	8	

Drive bays

3.5-inch internal bays	4
3.5-inch external bays	2
5.25-inch external bays	2
Drive bay notes	Up to 8x 2.5-inch HDDs (cold plug) and 1x 2.5-inch SSD or Up to 4x 3.5-inch HDDs (cold plug) and 1x 2.5-inch SSD or Up to 2x 2.5-inch and 2x 3.5-inch HDDs (cold plug) and 1x 2.5-inch SSD

Slots

PCI-Express 3.0 x4 (mech. x8)	2 x (312 mm / 12.29 inch) Full height
PCI-Express 3.0 x16	2 x (312 mm / 12.29 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm / 12.29 inch) Full height
PCI (32-bit / 33 MHz)	2 x (312 mm / 12.29 inch) Full height

Electrical values

Power consumption note	190 W depending on configuration	250 W depending on configuration
Rated voltage range	100 V - 240 V	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz	50 Hz - 60 Hz
Operating voltage range	100 V - 240 V	100 V - 240 V
Operating line frequency range	50 Hz - 60 Hz	50 Hz - 60 Hz
Max. output of single power supply	500 W up to 90% efficiency	800 W up to 90% efficiency

Noise for standard configuration (HDD, ODD, FDD)

Noise emission	According to ISO9296 (LpAm at bystander position)	According to ISO9296 (LpAm at bystander position)
Noise Operation mode 4: High load	20 dB(A)	20 dB(A)
Noise Operation mode 5: Office applications	20 dB(A)	20 dB(A)
Idle mode	20 dB(A)	20 dB(A)
Office mode	20 dB(A)	20 dB(A)
Noise notes	depending on configuration	depending on configuration

Dimensions / Weight / Environmental

Dimensions (W x D x H)	186 x 481 x 430 mm
Operating position	Vertical / horizontal
Weight	18 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS M720	CELSIUS M720 Power
Model	ETNA_S-D3128	
Germany	GS depending on configuration	
Europe	CE Nordic Swan	
USA/Canada	cCSAus FCC Class B	
Global	RoHS (EU & China) Medical EMC standard IEC60601-1-2 in combination with medical kit Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 WEEE (Waste electrical and electronic equipment) EPEAT® Gold (dedicated regions)	
Japan	VCCI	
Russia	GOST	
South Korea	KCC	
China	CCC	
Taiwan	BSMI	
Saudi Arabia	SASO	
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates	

Security

Physical Security	Kensington Lock support Eye for padlock Intrusion switch Integrated cabinet lock (optional)
System and BIOS Security	Write protect option for the Flash EPROM Boot protection for floppy disk / CD drive and write protection for floppy disk drive Dynamic USB security for full hardware USB protection Control of all USB interfaces Trusted platform module (TPM 1.2) EraseDisk
User Security	User and supervisor BIOS password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional)

Additional Software

Additional software (preinstalled)	Norton Internet Security (incl. Firewall) 60 days version Microsoft Office (buy license to activate the pre-installed Microsoft Office)
Additional software (optional)	CyberLink PowerDVD BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Drivers & Utilities DVD (DUDVD) Windows® 7 and Windows® XP Nero Essentials (burning software)

Miscellaneous

	Rack mountable (5U)	Rack mountable (5U)
Spare part availability	5 years	5 years

Manageability

Manageability technology	DeskUpdate Driver management iAMT Intel® Active Manageability Technology v7.1 (not activated, not set up)
Manageability software	DeskView Client DeskView Instant BIOS Management DeskView Integration for Symantec Management Platform

Manageability

DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management
Supported standards	WMI BootP (made4you) PXE WoL (Wake on LAN)
Manageability link	http://www.fujitsu.com/fts/manageability

Input device / components

	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse Space Explorer USB Keyboard

Warranty

Standard Warranty	3 years (depending on country)
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 3 years material warranty)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Maintenance and Support Services - the perfect extension	
Recommended Service	9x5, Response Time: Next Business Day
Spare Parts availability	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

Recommended Accessories

Standard Security Lock		We at Fujitsu Technology Solutions consider the safety of your devices to be paramount. The Standard Security Lock is our low cost option that saves you money without ever sacrificing on quality or security. The 180cm cord comes with two keys, and is compatible with any product utilizing Kensington's patented T-Bar locking mechanism.	Order Code: S26361-F1650-L210
Mouse M440 ECO		Fujitsu Mouse M440 ECO is made from 100% bio material and has a completely PVC free cable. The elegant M440 ECO works on nearly every surface and follows all your hand movements smoothly and precisely. It features two main buttons and as well as a scroll wheel providing comfortable computing to both right and left-handed users.	Order Code: S26381-K450-L200
SpaceMouse™ Pro		Using the SpaceMouse™ Pro 3D mouse to navigate 3D models or environments is as simple as holding them in your hand. A slight movement of the controller cap delivers easy and precise control. SpaceMouse™ Pro is a companion to the traditional mouse and is operated with the free hand. Your traditional mouse hand is free to select, create and edit.	Order Code: S26381-K459-L100
Keyboard KBPC PX ECO		Fujitsu's KBPC PX ECO keyboard is the perfect contribution to Green IT. The keyboard is made out of 45% renewable raw material and comes with a PVC free USB cable. In addition, the KBPC PX ECO offers first class comfort and ergonomics. It attracts attention with its impressive modern design and useful extras.	S26381-K341-L1** (**: country specific variation)

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu CELSIUS M720, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu CELSIUS M720, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts/CELSIUS

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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